

IN THE CLAIMS:

1. (Currently Amended) A fermentation composition for treatment of aquatic environments, the composition comprising:

an activated organic matrix comprising barley straw from approximately 25 to 97.9% concentration, beneficial saprophytic bacteria composed of one or more strains selected from the group consisting of *Bacillus subtilis*, *Bacillus licheniformis*, *Bacillus amyloliquefaciens*, *Paenibacillus polymyxa*, *Bacillus megaterium*, *Bacillus psychrophilus*, *Bacillus globiformis*, *Bacillus psychrosaccharolyticus*, *Bacillus benzovorans*, *Bacillus vallismortis*, *Bacillus mojavenensis*, *Bacillus stearothermophilus*, and *Bacillus acidopulliticus*, ~~associated~~ beneficial hydrolytic enzymes, and soluble catabolic breakdown products of the barley straw, wherein the composition has been comminuted into a dry granulated fermentation product.

2. (Previously Presented) The composition according to Claim 1 wherein the activated organic matrix further comprises wheat bran.

Claims 3 through 10 (Canceled)

11. (Withdrawn) A method for producing a dried granular fermentation composition of Claim 1 comprising the following steps:

(a) providing an activated organic matrix which comprises one or more products selected from the group consisting barley straw, rye straw, wheat straw, ground barley and whole-grain barley grain,

(b) adding water in an amount of 35% to 60% by weight based on the weight of the total composition to said organic matrix,

(c) inoculating the organic matrix with saprophytic bacteria;

(d) incubating the organic matrix until bacterial growth occurs; and

(e) drying the organic matrix to stabilize the saprophytic bacteria.

12. (Withdrawn) A method as set forth in Claim 11 including the additional step of chopping said organic matrix into pieces from about .2 cm to about 5 cm in length prior to said addition of water.

Claims 13 through 16 (Canceled)